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A POPULATION OF *ANAEA RYPHEA* (NYMPHALIDAE) AND ITS
LARVAL FOOD PLANT AT CAMPINAS, BRAZIL

Additional key words: *Croton floribundus*, Euphorbiaceae, *Hypna clytemnestra*, São Paulo.

The butterfly *Anaea ryphea* (Cramer 1775) (Nymphalidae) occurs from Mexico to subtropical South America, although its host plant is unknown (De Vries, P. 1987, The butterflies of Costa Rica and their natural history, Princeton Univ. Press, Princeton, New Jersey, 327 pp.). From September 1988 to March 1990 I studied a population of *Anaea ryphea* in a small reserve at Campinas, São Paulo State, Brazil (22°54'S and 47°05'W, elevation 650 m, annual rainfall 1500 mm, mean annual temperature 22°C) where it uses *Croton floribundus* Spreng (Euphorbiaceae) as its larval food plant.

Other species of *Anaea* are known to feed on Euphorbiaceae, such as *Anaea andria* Scudder which uses *Croton capitatus* Michx. as its primary host plant in the southern United States (Riley, T. J. 1988, J. Lepid. Soc. 42:263-268). Feeding on *Croton* may be a common feature of the genus, since *Croton* has a wide distribution in the tropics (Schnell, R. 1971, Introduction à la phytogéographie des pays tropicaux, Gauthier-Villars, Paris, 951 pp.), but other families are also used. Muysshondt found immatures of *Anaea* (*Zaretis*) *itys* Cramer on a species of Flacourtiaceae (also known as Samydaceae) (Muysshondt, A. 1973, J. Lepid. Soc. 27:294-302) and eggs and larvae of *Anaea* (*Consul*) *fabius* Cramer on three species of Piperaceae (Muysshondt, A. 1974, J. Lepid. Soc. 28:81-89). W. P. Comstock (1961, Butterflies of the American tropics: The genus *Anaea*, American Museum of Natural History, New York, 214 pp., 30 pls.) lists food plant records from seven plant families, with Euphorbiaceae (especially *Croton*) and Piperaceae being the most frequently used.

A species of *Anaea* can use more than one plant species as larval food plant (Muysshondt 1973, 1974, *op. cit.*). At Campinas I observed *A. ryphea* feeding on a second plant species (an unidentified Euphorbiaceae) at times when *C. floribundus* plants were completely defoliated or when they had only old leaves at the end of the wet season. At this time the larval population was decreasing rapidly from its maximum peak of 136 larvae on 186 plants in the study area.

Another species of Nymphalidae, *Hypna clytemnestra* (Cramer 1777) also was observed feeding on *Croton floribundus*. Its larvae and those of *A. ryphea* were sometimes found together on the same individual plant, but the number of *A. ryphea* immatures was always greater than that of *H. clytemnestra*, whose measured population density was never more than 10% of that of *A. ryphea*.

Larvae of *H. clytemnestra* are larger than *A. ryphea*, and in the laboratory they proved to be more voracious feeders; as a consequence, they cause heavy defoliation on *C. floribundus*, sometimes leading to starvation of *A. ryphea* larvae, which cannot move to other nearby plants.

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